

# American Community Survey

“It Don’t Come Easy”, Ringo Starr



**Jane Traynham**

**Maryland State Data Center**

**March 15, 2011**

# Why so difficult?

- Geographies with 65,000 persons get single year data each year
- Smaller geographies have data “pooled” over 3 years or 5 years
- Period Estimates – not point in time, not easy for people to understand or explain
- Different residence rules – not usual place of residence as with decennial; ACS is current residence (living in place for 2 mos)

# Why so difficult cont'd

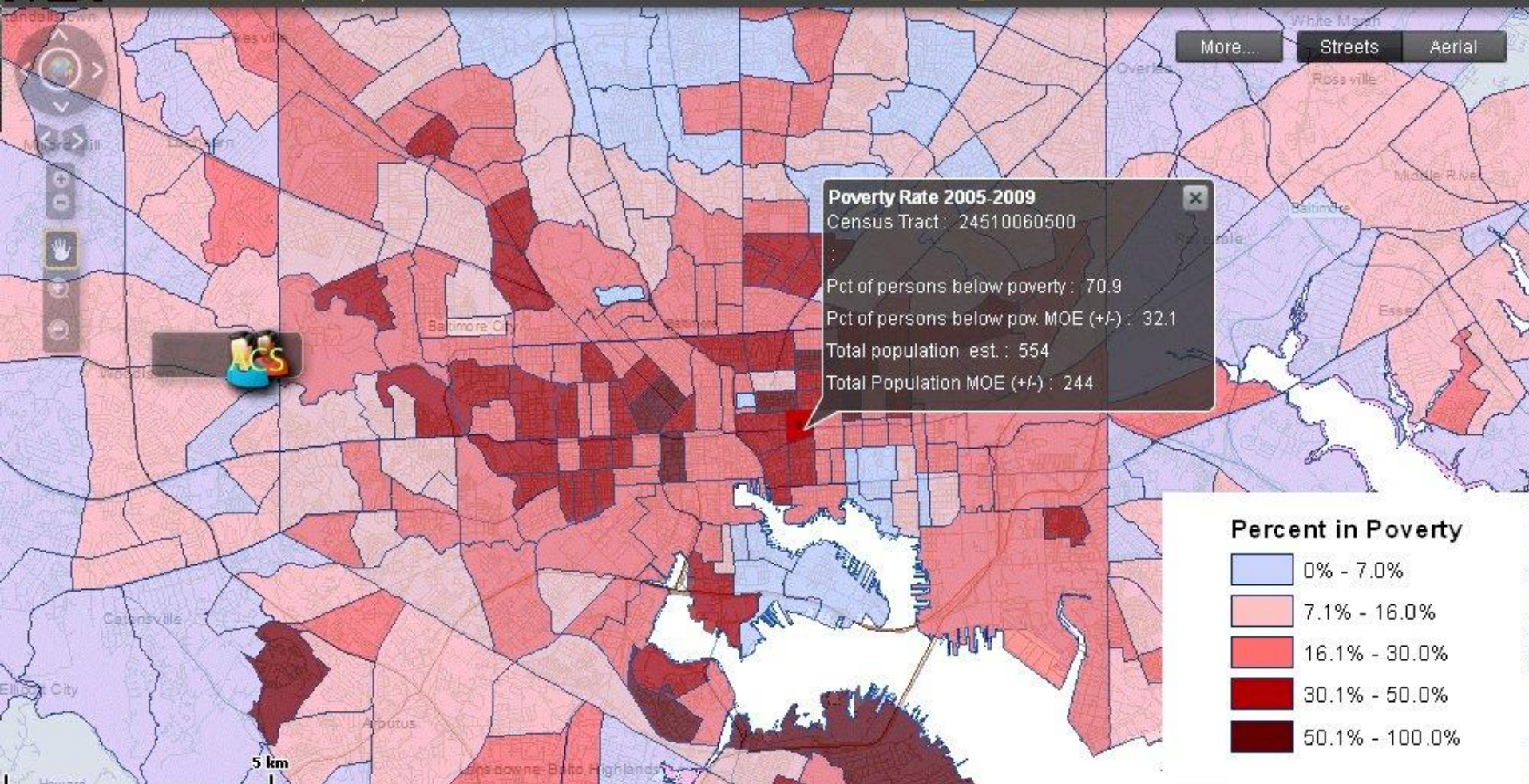
## Most Recent Releases

- September '10 - **2009 Single year data** for *areas over 65,000*
- December '10 – **5 yr.(2005-2009) data** for *all areas down to census tract; block group data* only available in Census summary files – *not easy to access*
- January '11– **3 yr. (2007-2009) data** – *all areas over 20,000*

# Why so difficult? cont'd

- Smaller sample size – prior census decennial long form – 1 in 6 households now approx. 1 in 40 – affects reliability
- Don't mix and match single year with multi-year (or 3 yr. with 5 yr.)
- Did I mention Margins of Error, Standard Errors, confidence intervals and coefficients of variation?





# Example of Estimate with large MOEs



## Poverty Rate 2005-2009

Census Tract : 24510060500

Pct of persons below poverty : 70.9

Pct of persons below pov. MOE (+/-) : 32.1

Total population est. : 554

Total Population MOE (+/-) : 244

38.8% - 103.0 %

# ACS Multiyear Estimates

- 3 yr. estimates for areas greater than 20,000 pop.
  - data aggregated for years 2007, 2008 & 2009;
- 5 yr. estimates available all areas
  - aggregated for years 2005, 2006, 2007, 2008 & 2009

# ACS Multiyear cont'd

- Multiyear estimates more precise than single year because sample size is larger (aggregated over longer period of time)
- Which is more important for your application -  
most current data – *use single year*  
validity of data – *use multiyear*
- If geography is large (such as a metro county) -  
single year data may be acceptable and provide  
information on the most recent changes (look at  
the margin of error)



# More Multiyear

- Estimates are based on boundaries of the last year (i.e. 2007-2009 city data would use the boundary as of Jan. '09)
- All years in multiyear estimates are given the same weight; all months (36 for the 3 yr est.) are aggregated
- Dollar values such as income and housing value are adjusted with inflation factors to reflect the end year of the time period (**ACS 2007-2009, IN 2009 INFLATION-ADJUSTED DOLLARS**)
- Each year a new product is released; the earliest year is dropped and the most recent year is added (**3 yr. data 2007-2009 will be 2008-2010 this year; 5 yr. data 2005-2009 will be 2006-2010**)

# ACS Methodology Review

About 250,000 surveys mailed each month nationally

Equal to about 3 million annually - corresponds to a 1 in 40 sample (approx. 2.5%); decennial long form was 1 in 6 addresses (16.6%)

ACS is not meant to be used for “counts” of population or race, use the annual population estimates

ACS provides “characteristics” about the population

# Finding ACS Data in American Factfinder

The screenshot shows the U.S. Census Bureau homepage. At the top, the header includes the U.S. Census Bureau logo, navigation links for FAQs, Subjects A to Z, and Help, and a search bar with a GO button. The main content area features a large banner for the 2010 Resident Population, showing 308,745,538. To the left of the banner is a sidebar with various links: Redistricting Data, New on the Site, Data Tools, American FactFinder (highlighted with a red arrow), Jobs@Census, Catalog, Publications, Are You in a Survey?, About the Bureau, Regional Offices, Doing Business with Us, and Related Sites. To the right of the banner are sections for Census Blogs, Data Finders (Population Clocks showing U.S. 310,882,091 and World 6,902,025,973), Population Finder\*, and Find An Area Profile with QuickFacts. A large red box at the bottom contains the URL www.census.gov.

U.S. Census Bureau

FAQs | Subjects A to Z | Help

SEARCH:  GO

**Redistricting Data**  
First Look at Local Data

New on the Site

Data Tools

**American FactFinder**

Jobs@Census

Catalog

Publications

Are You in a Survey?

About the Bureau

Regional Offices

Doing Business with Us

Related Sites

**2010 RESIDENT POPULATION**  
**308,745,538**

Learn more about your state

► Data Map  
► American Factfinder  
► Video

► News  
► Director's Blog  
► Census Blog

**Read our Census Blogs**

**Data Finders**

Population Clocks  
**U.S. 310,882,091**  
World 6,902,025,973  
20:21 UTC (EST+5) Feb 24, 2011

Population Finder\*  
\* Does not currently contain 2010 data  
city/ town, county, or zip  
  
or state  
Select a state

Find An Area Profile with QuickFacts  
Select a state to begin  
Select a state

**People & Households**  
[American Community Survey](#) · [Estimates](#) · [Projections](#) · [Housing](#) · [Income](#) | [State Median Income](#) · [Poverty](#) · [Health Insurance](#) · [International](#) · [Genealogy](#) · [Census 2000](#) · [More](#)

**Business & Industry**  
[Economic Census](#) · [Get Help with Your Form](#) · [Economic Indicators](#) · [NAICS](#) · [Survey of Business Owners](#)

**www.census.gov**





## *The NEW American FactFinder is now available!*

The transition from the legacy American FactFinder to the NEW American FactFinder will continue through the fall of 2011. Data on the legacy FactFinder will be moved to the NEW FactFinder in the coming months. [Frequently Asked Questions »](#)

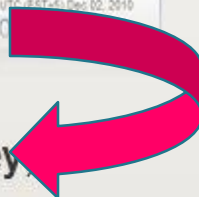
The legacy American FactFinder will be discontinued in the fall of 2011.



for data from  
**Census 2010** (beginning in February 2011)  
and **Census 2000**  
go to  
**factfinder2.census.gov**



for data from the  
**American Community Survey**,  
the **Economic Census**,  
and **Population Estimates**  
go to  
**factfinder.census.gov**



## HOUSING

- Physical Characteristics
- Financial Characteristics

## BUSINESS AND GOVERNMENT

## ABOUT THE DATA

## DATA SETS

## DOWNLOAD CENTER

## MAPS

## TOOLS AND REFERENCES

### Address Search

Enter a [street address](#) to find Census 2000 data

- [Browser Notes](#)
- [Confidentiality](#)
- [Citing FactFinder](#)

## ABOUT THE DATA

## DATA SETS

- Decennial Census
- American Community Survey
- Puerto Rico Community Survey
- Annual Population Estimates
- Economic Census
- Annual Economic Surveys

## DOWNLOAD CENTER

## MAPS

## TOOLS AND REFERENCES

For data from Census 2010 and Census 2000, visit [factfinder2.census.gov](http://factfinder2.census.gov)

As we transition to the NEW American FactFinder,

## NEW American FactFinder is here!

[Download data and view documentation](#)

- [Download Center](#)
- [Download 1996-2004 data via FTP](#)

[i Explain Table and Map Formats](#)

### 2009

#### 2005-2009 American Community Survey 5-Year Estimates

- Data from the American Community Survey and the Puerto Rico Community Survey
- Collected during calendar years 2005, 2006, 2007, 2008 and 2009
- Available for small geographic areas

[Explain 1-year vs. 3-year vs. 5-year estimates](#)

[Download 5-Year Block Group Data in Summary Files](#)

5 Year

#### 2007-2009 American Community Survey 3-Year Estimates

- Data from the American Community Survey and the Puerto Rico Community Survey
- Collected during calendar years 2007, 2008 and 2009
- Available for geographic areas with populations of 20,000 or more

[Explain 1-year vs. 3-year vs. 5-year estimates](#)

Select from the following:

[Data Profiles](#)  
[Selected Population Profiles](#)  
[Subject Tables](#)  
[Detailed Tables](#)  
[Geographic Comparison Tables](#)  
[Thematic Maps](#)  
[Reference Maps](#)

[Custom Table](#)

[Enter a table number](#)  
[List all tables](#)  
[List all maps](#)  
[Download PUMS data](#)  
[About this data set](#)

#### 2009 American Community Survey 1-Year Estimates


- Data from the American Community Survey and the Puerto Rico Community Survey
- Collected during calendar year 2009

3 Year

1 Year



# Population profile ACS 2007-2009 for Country of Birth

**American FactFinder**

[Main](#) [Search](#) [Feedback](#) [FAQs](#) [Glossary](#) [Site Map](#) [Help](#)

## Selected Population Profile

You are here: [Main](#) ▶ [Data Sets](#) ▶ [Geography](#) ▶ [Population Groups](#) ▶ **Results**

[Change...](#)  
[geography \(state, county, place...\)](#)  
[population group](#)

[Subject Definitions](#)  
[Quality Measures](#)

### Montgomery County, Maryland

#### S0201. Selected Population Profile in the United States ?

Country of Birth: **Latin America:** ←  
Data Set: 2007-2009 American Community Survey 3-Year Estimates  
Survey: American Community Survey

NOTE: For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

Subject	Total population	<a href="#">Margin of Error</a>	Latin America:	<a href="#">Margin of Error</a>
<b>TOTAL NUMBER OF RACES REPORTED</b>				
Total population	955,592	*****	104,168	+/-2,878
One race	97.2%	+/-0.2	97.1%	+/-0.8
Two races	2.5%	+/-0.2	2.8%	+/-0.8
Three races	0.2%	+/-0.1	0.1%	+/-0.1
Four or more races	0.0%	+/-0.1	0.0%	+/-0.1
<b>SEX AND AGE</b>				
Total population	955,592	*****	104,168	+/-2,878
Male	48.4%	+/-0.1	49.8%	+/-0.9
Female	51.6%	+/-0.1	50.2%	+/-0.9
Under 5 years	7.2%	+/-0.1	0.5%	+/-0.3
5 to 17 years	17.4%	+/-0.1	6.5%	+/-0.8
18 to 24 years	8.5%	+/-0.1	10.0%	+/-0.8
25 to 34 years	12.4%	+/-0.1	22.6%	+/-0.8
35 to 44 years	14.8%	+/-0.1	23.4%	+/-0.7
45 to 54 years	15.9%	+/-0.1	18.0%	+/-0.7





## Select Population Groups

You are here: [Main](#) ▶ [Data Sets](#) ▶ [Geography](#) ▶ [Population Groups](#) ▶ [Results](#)

2006-2008 American Community Survey 3-Year Estimates, Selected Population Profile

[Race or Ethnic Groups](#)[Ancestry Groups](#)[Country of Birth](#)

Drilling down further to a specific country in Latin America may yield no results unless there is at least 20,000 population from that specific country of birth

Select a country of birth and click 'Show Result'

... .. Sierra Leone  
... .. Africa, not elsewhere classified  
Americas:  
Latin America:  
... .. Caribbean:  
... .. Bahamas  
... .. Barbados  
... .. Cuba  
... .. Dominica  
... .. Dominican Republic

[Explain Country of Birth](#)[Show Result ▶](#)

## Selected Population Profile

You are here: [Main](#) ▶ [Data Sets](#) ▶ [Geography](#) ▶ [Population Groups](#) ▶ [Results](#)

[Print / Download](#) | [Related Items](#)

Change...

[geography \(state,  
county, place...\)](#)  
[population group](#)

- [Subject Definitions](#)
- [Quality Measures](#)

### Montgomery County, Maryland

S0201. Selected Population Profile in the United States ?

Country of Birth: Caribbean:

Data Set: 2007-2009 American Community Survey 3-Year Estimates

Survey: American Community Survey

NOTE: Data are not available for the selected geography because the population for the selected race, ethnic or ancestry group falls below a population threshold of 20,000. To view a table for the selected geography, choose a more broadly defined population group. To view a table for the selected population group, change your selection to a larger geography.

Geography:

Montgomery County, Maryland

Note: Data are not available...

# What Factors May Affect Reliability

---

- More detailed characteristics
- Smaller geographies
- Sample size of interviews

Data Set: 2009 American Community Survey 1-Year Estimates

Survey: American Community Survey

Geographic Area: Frederick County, Maryland

Selected Economic Characteristics	Estimate	Margin of Error (+/-)
PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL		
All families	4.6%	1.2
With related children under 18 years	6.9%	2.2
With related children under 5 years only	11.3%	7.3
Married couple families	2.6%	1
With related children under 18 years	3.1%	1.8
With related children under 5 years only	5.6%	5.5
Families with female householder, no husband present	16.7%	7.4
With related children under 18 years	23.1%	10
With related children under 5 years only	55.4%	32.7
All people	5.5%	1.1
Under 18 years	6.4%	2.4

Look at the variations in the margins of error between “**all families**” vs. those w/ female householder w/ related children under 5 yrs

**This is from the “data profiles” selection in FactFinder**



**Selected Economic Characteristics: 2009****Data Set: 2009 American Community Survey 1-Year Estimates****Geographic Area: Allegany County, Maryland**

<b>Selected Economic Characteristics</b>	<b>Estimate</b>	<b>Margin of Error (+/-)</b>
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>		
All families	12.7%	4.8
With related children under 18 years	28.5%	10.2
With related children under 5 years only	37.6%	18.9
Married couple families	4.6%	2.9
With related children under 18 years	8.5%	7.7
With related children under 5 years only	11.8%	18.7
Families with female householder, no husband present	43.6%	16.6
With related children under 18 years	63.2%	19
With related children under 5 years only	74.3%	31.1

**Selected Economic Characteristics: 2009****Data Set: 2009 American Community Survey 1-Year Estimates****Geographic Area: Prince George's County, Maryland**

<b>Selected Economic Characteristics</b>	<b>Estimate</b>	<b>Margin of Error (+/-)</b>
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>		
All families	4.6%	0.9
With related children under 18 years	6.7%	1.5
With related children under 5 years only	7.8%	3.4
Married couple families	1.8%	0.6
With related children under 18 years	2.2%	1.1
With related children under 5 years only	3.4%	2.9
Families with female householder, no husband present	9.7%	2.1
With related children under 18 years	13.5%	3.1
With related children under 5 years only	15.7%	10

**MOE 31% Allegany vs 10% for Prince George's**

**B00002. UNWEIGHTED SAMPLE HOUSING UNITS - Universe: HOUSING UNITS**  
**Data Set: 2009 American Community Survey 1-Year Estimates**  
**Survey: American Community Survey**

	Prince George's County, Maryland
	Estimate
<b>Total</b>	<b>4,147</b>

**B00002. UNWEIGHTED SAMPLE HOUSING UNITS - Universe: HOUSING UNITS**  
**Data Set: 2007-2009 American Community Survey 3-Year Estimates**  
**Survey: American Community Survey**

	Prince George's County, Maryland
	Estimate
<b>Total</b>	<b>12,502</b>

**Larger Sample for 3 YR. vs 1 Yr.**



# Suppression of Data

---

Data may not be available for some detailed tables or for some geographies to avoid confidentiality concerns

## Select Tables

You are here: [Main](#) ▶ [Data Sets](#) ▶ [Data Sets with Detailed Tables](#) ▶ [Geography](#) ▶ [Tables](#) ▶ Results  
2009 American Community Survey 1-Year Estimates, Detailed Tables

■ Choose a table selection method

by subject

by keyword

show all tables

■ Select one or more tables and click 'Add'

[i explain table numbers](#)

B01002I. Median Age by Sex (Hispanic or Latino)  
B01003. Total Population  
B02001. Race  
B02003. Race  
**C02003. Race**  
B02005. American Indian and Alaska Native Alone for Selected Tribal Groupings  
C02005. American Indian and Alaska Native Alone for Selected Tribal Groupings  
B02006. Asian Alone by Selected Groups  
C02006. Asian Alone by Selected Groups  
B02007. Native Hawaiian and Other Pacific Islander Alone by Selected Groups

Abbreviations:

Black - Black or African American  
AIAN - American Indian and Alaska Native  
NHPI - Native Hawaiian and Other Pacific Islander  
SOR - Some Other Race

What's this?

Add ▼

Current table selections:

B02003. Race  
C02003. Race

Remove

Show Result ►

B tables – detailed  
C tables - collapsed

In some cases one or more items in a table may be suppressed because there are not enough people in the sample to assure that confidentiality is maintained. In that case the entire table will contain no data.

You may want to look for a “collapsed” table with fewer data items.

## Detailed Tables

You are here: [Main](#) ▶ [Data Sets](#) ▶ [Data Sets with Detailed Tables](#) ▶ [Geography](#) ▶ [Tables](#) ▶ [Results](#)

Use the links above to change your results

| [Options](#) | [Print](#) /

### B02003. RACE - Universe: TOTAL POPULATION

Data Set: 2007-2009 American Community Survey 3-Year Estimates

Survey: American Community Survey

NOTE: Data for the following geographic area(s) cannot be displayed for one or more of the following reasons:

- The number of sample cases is too small.
- This table is only available for the United States.

Geography:

Allegany County, Maryland  
Prince George's County, Maryland

**Data are not available for any county – only available for the U.S. may want to look at a collapsed version of the table**

# **C02003. RACE - Universe: TOTAL POPULATION**

**Data Set: 2009 American Community Survey 1-Year Estimates**

**Survey: American Community Survey**

	Montgomery County, Maryland	
	Estimate	Margin of Error
Total:	971,600	*****
Population of one race:	942,776	+/-4,309
White	564,083	+/-6,264
Black or African American	161,476	+/-3,199
American Indian and Alaska Native	4,759	+/-2,164
Asian alone	131,061	+/-1,775
Native Hawaiian and Other Pacific Islander	164	+/-201
Some other race	81,233	+/-7,387
Population of two or more races:	28,824	+/-4,309
Two races including Some other race	5,409	+/-1,824
Two races excluding Some other race, and three or more races	23,415	+/-4,153
Population of two races:	25,865	+/-3,547
White; Black or African American	6,390	+/-2,053
White; American Indian and Alaska Native	3,413	+/-1,742
White; Asian	8,731	+/-1,707
Black or African American; American Indian and Alaska Native	472	+/-322
All other two race combinations	6,859	+/-1,898
Population of three races	2,820	+/-2,262
Population of four or more races	139	+/-231



# Finding ACS data

[www.census.gov](http://www.census.gov)

American FactFinder

[www.census.gov/acs/www/](http://www.census.gov/acs/www/)

ACS page on Census site